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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,507	10/17/2003	Ruhe Shi	N8226	1978

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WADDEY & PATTERSON
414 UNION STREET, SUITE 2020
BANK OF AMERICA PLAZA
NASHVILLE, TN 37219

EXAMINER	
LEE, WILSON	

ART UNIT	PAPER NUMBER
2821	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary	Application No.	Applicant(s)	
	10/688,507	SHI, RUHE	
	Examiner	Art Unit	
	Wilson Lee	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-65* is/are pending in the application.

4a) Of the above claim(s) *25-65* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12 and 18* is/are rejected.

7)☒ Claim(s) *13-17 and 19-24* is/are objected to.

8)☒ Claim(s) *25-65* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/15/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Remarks

Applicant elects Group II, species I of claims 12-24 without traverse on 2/25/05. Claims 1-11 are canceled. Claims 25-65 have been withdrawn.

Claim Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsugita et al. (6,429,603).

Regarding Claim 12, Tsugita discloses an electronic ballast protection and control circuit comprising an end of lamp life sensing and control circuit (NP1) adapted to sense an end of lamp life condition in a gas discharge lamp load (LAC1) connected to an electronic ballast and to cause the electronic ballast to enter an end of lamp life protected state (stop Q1, Q2) when the end of lamp life condition occurs; and wherein the end of lamp life sensing and control circuit is adapted to be capacitively (C5, C6) coupled across an output of the electronic ballast, to sense the end of lamp life condition by sensing a peak-to-peak voltage (Vmax-Vmin) that develops across the gas discharge lamp load when the end of lamp life condition occurs, to generate an end of lamp life control signal when the peak-to-peak voltage exceeds a predetermined end of lamp life reference voltage (a Zener voltage), and adapted to set the predetermined end of lamp life reference voltage using an end of lamp life reference component (DZ2)

included in the end of lamp life sensing and control circuit (See Figure 34, Col. 1, line 66 to Col. 4, line 28).

Regarding Claim 18, Tsugita discloses a protection and control circuit (NP1) for an electronic ballast, comprising: an end of lamp life sensing and control circuit adapted to be capacitively (C5, C6) coupled across an output of the electronic ballast (T1), to sense an end of lamp life condition in a gas discharge lamp load (LA) connected to the electronic ballast and to cause the electronic ballast to enter en end of lamp life protected state (stop Q1, Q2) when the load of lamp life condition occurs; wherein the end of lamp life sensing and control circuit is adapted to generate an end of lamp life control signal that is used to cause the electronic ballast to enter the end of lamp life protected state (stop Q1, Q2); and wherein the end of lamp life sensing and control circuit (NP1) is adapted to generate the end of lamp life control signal when a DC end of lamp life reference voltage (Vmax-Vmin) generated by the end of lamp life sensing and control circuit (NP1) exceeds a predetermined DC end of lamp life reference voltage (a Zener voltage) (See Col. 1, line 10 to Col. 4, line 28).

Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Allison et al. (6,366,032) cited in IDS by applicant.

Regarding Claim 18, Allison discloses a protection and control circuit (50, 34) for an electronic ballast, comprising: an end of lamp life sensing and control circuit adapted to be capacitively (58) coupled across an output of the electronic ballast (90), to sense an end of lamp life condition in a gas discharge lamp load (12, 14) connected to the electronic ballast and to cause the electronic ballast to enter en end of lamp life

protected state when the load of lamp life condition occurs; wherein the end of lamp life sensing and control circuit is adapted to generate an end of lamp life control signal that is used to cause the electronic ballast to enter the end of lamp life protected state; and wherein the end of lamp life sensing and control circuit (50, 34) is adapted to generate the end of lamp life control signal when a DC end of lamp life reference voltage (a second signal) generated by the end of lamp life sensing and control circuit exceeds a predetermined DC end of lamp life reference voltage (second threshold level) (See Col. 1, line 35 to Col. 2, line 35).

Allowable subject matter

Claims 13-17, 19-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chang et al. (6,362,575) discloses a voltage regulated electronic ballast for multiple discharge lamps.

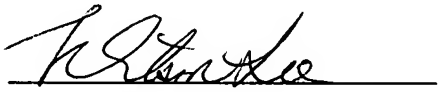
Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824.

Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be

considered an official response must be clearly marked "DRAFT". The official fax number is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

5/2/05